



[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2012-1100; Directorate Identifier 2012-NE-29-AD; Amendment 39-17385; AD 2013-05-13]

RIN 2120-AA64

Airworthiness Directives; Rolls-Royce Deutschland Ltd & Co KG Turbofan Engines

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule.

SUMMARY: We are adopting a new airworthiness directive (AD) for certain Rolls-Royce Deutschland Ltd & Co KG (RRD) BR700-710 series turbofan engines. This AD requires replacement of the affected fuel pump splined couplings. This AD was prompted by service experience that demonstrated premature wear of the splined coupling on the fuel pump. We are issuing this AD to prevent failure of the engine and loss of the airplane.

DATES: This AD becomes effective [Insert date 35 days after date of publication in the FEDERAL REGISTER].

ADDRESSES: The Docket Operations office is located at Docket Management Facility, U.S. Department of Transportation, 1200 New Jersey Avenue SE., West Building Ground Floor, Room W12-140, Washington, DC 20590-0001.

FOR FURTHER INFORMATION CONTACT: Frederick Zink, Aerospace Engineer, Engine Certification Office, FAA, Engine & Propeller Directorate, 12 New England Executive Park, Burlington, MA 01803; email: frederick.zink@faa.gov; phone: 781-238-7779; fax: 781-238-7199.

SUPPLEMENTARY INFORMATION:

Discussion

We issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 to include an AD that would apply to the specified products. That NPRM was published in the *Federal Register* on November 7, 2012 (77 FR 66771). That NPRM proposed to require replacement of the affected fuel pump splined couplings. The Mandatory Continuing Airworthiness Information states:

In-service experience of RRD BR700-710 fuel pump installed on the rear face of the accessory gearbox identified premature wear of the splined coupling, which caused damage to the splined coupling.

This condition, if not corrected, could lead to failure of engine fuel supply, likely resulting in an uncommanded in-flight shutdown and consequently reduced control of the aeroplane.

Comments

We gave the public the opportunity to participate in developing this AD. We considered the comment received.

Request to Withdraw the AD

An anonymous commenter requested that the FAA withdraw the proposed rule (77 FR 66771, November 7, 2012). The commenter indicated that the rule is a “waste of government resources” because a service bulletin has been issued and larger companies

and individuals will comply because it is in their best interest while smaller companies will “suffer.”

We do not agree. We reviewed the service experience of the affected fuel pump splined couplings and determined that an unsafe condition exists and that corrective action is required. Although some operators may take corrective action based on the service bulletin, the issuance of an AD makes compliance mandatory for all. We made no change to the AD.

Change to Installation Prohibition Paragraph

We determined when reviewing the proposed rule (77 FR 66771, November 7, 2012), that the Installation Prohibition paragraph (g) was not consistent with the compliance paragraph (e). The Installation Prohibition paragraph in the NPRM forbids returning to service any engine with a fuel pump with an affected splined coupling that has accumulated 4,000 hours time in service (TIS). This prohibition is not consistent with compliance paragraph (e) which allows engines with affected spline couplings to be returned to service for those engines with 3,750 hours or more TIS, while allowing an additional 250 hours TIS to comply. The Installation Prohibition paragraph should have been directed against “installing” an affected fuel pump into an engine or installing an engine with an affected fuel pump into an aircraft rather than against returning an engine to service with an affected fuel pump.

The Installation Prohibition paragraph now reads: “After the effective date of this AD, do not install into any engine a fuel pump with an affected splined coupling that has accumulated 4,000 hours TIS, or install any engine with an affected splined coupling that has accumulated 4,000 hours TIS onto an airplane.”

Conclusion

We reviewed the available data, including the comment received, and determined that air safety and the public interest require adopting the AD with the changes described previously. We determined that these changes will not increase the economic burden on any operator or increase the scope of the AD.

Costs of Compliance

We estimate that this AD affects about 1,040 engines installed on airplanes of U.S. registry. We also estimate that it will take about 6 hours per engine to comply with this AD. The average labor rate is \$85 per hour. Required parts cost about \$1,035 per engine. Based on these figures, we estimate the cost of this AD to U.S. operators to be \$1,606,800.

Authority for This Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. "Subtitle VII: Aviation Programs," describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in "Subtitle VII, Part A, Subpart III, Section 44701: General requirements." Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

Regulatory Findings

We determined that this AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify this AD:

1. Is not a “significant regulatory action” under Executive Order 12866;
2. Is not a “significant rule” under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979); and
3. Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

We prepared a regulatory evaluation of the estimated costs to comply with this AD and placed it in the AD docket.

Examining the AD Docket

You may examine the AD docket on the Internet at <http://www.regulations.gov>; or in person at the Docket Operations office between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this AD, the regulatory evaluation, any comments received, and other information. The street address for the Docket Operations office (phone: (800) 647-5527) is provided in the ADDRESSES section. Comments will be available in the AD docket shortly after receipt.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

Adoption of the Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 14 CFR part 39 as follows:

PART 39 - AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. The FAA amends § 39.13 by adding the following new AD:

2013-05-13 Rolls-Royce Deutschland Ltd & Co KG (Formerly Rolls-Royce Deutschland GmbH, and BMW Rolls-Royce plc): Amendment 39-17385; Docket No. FAA-2012-1100; Directorate Identifier 2012-NE-29-AD.

(a) Effective Date

This airworthiness directive (AD) becomes effective [Insert date 35 days after date of publication in the FEDERAL REGISTER].

(b) Affected ADs

None.

(c) Applicability

This AD applies to Rolls-Royce Deutschland Ltd & Co KG (RRD) BR700-710A1-10 and BR700-710A2-20 turbofan engines, all serial numbers, and BR700-710C4-11 turbofan engines that have either of the following hardware configuration standards engraved on the engine data plate:

(1) standard “710C4-11” -- RRD Alert Non-Modification Service Bulletin (NMSB) SB-BR700-72-101466 standard not incorporated, or

(2) standard “710C4-11/10” -- RRD Alert NMSB SB-BR700-72-101466 standard incorporated.

(d) Reason

This AD was prompted by service experience that demonstrated premature wear of the splined coupling on the fuel pump. We are issuing this AD to prevent failure of the engine and loss of the airplane.

(e) Actions and Compliance

Unless already done, do the following.

(1) After the effective date of this AD, replace the fuel pump splined coupling as follows and every 4,000 hours time in service (TIS) thereafter:

(i) If the engine has 3,750 hours TIS or more on the effective date of this AD, within 250 hours TIS.

(ii) If the engine has less than 3,750 hours TIS on the effective date of this AD, before reaching 4,000 hours TIS.

(2) If you replaced the engine fuel pump splined coupling before the effective date of this AD, replace the fuel pump splined coupling before reaching 4,000 hours TIS since last replacement, or before further flight, whichever comes later.

(f) Installation Prohibition

After the effective date of this AD, do not install into any engine a fuel pump with an affected splined coupling that has accumulated 4,000 hours TIS, or install any engine with an affected splined coupling that has accumulated 4,000 hours TIS onto an airplane.

(g) Alternative Methods of Compliance (AMOCs)

The Manager, Engine Certification Office, FAA, may approve AMOCs to this AD. Use the procedures found in 14 CFR 39.19 to make your request.

(h) Related Information

(1) For more information about this AD, contact Frederick Zink, Aerospace Engineer, Engine Certification Office, FAA, Engine & Propeller Directorate, 12 New England Executive Park, Burlington, MA 01803; email: frederick.zink@faa.gov; phone: 781-238-7779; fax: 781-238-7199.

(2) Refer to Mandatory Continuing Airworthiness Information AD No. 2012-0161, dated August 24, 2012, and RRD Alert NMSB SB-BR700-72-A900509, Revision 3, dated August 2, 2012, for related information.

(3) For service information identified in this AD, contact Rolls-Royce Deutschland Ltd & Co KG, Eschenweg 11, Dahlewitz, 15827 Blankenfelde-Mahlow, Germany; phone: 49 0 33-7086-1883; fax: 49 0 33-7086-3276. You may view the service information at the FAA, Engine & Propeller Directorate, 12 New England Executive Park, Burlington, MA. For information on the availability of this material at the FAA, call 781-238-7125.

(i) Material Incorporated by Reference

None.

Issued in Burlington, Massachusetts, on March 7, 2013.

Colleen M. D'Alessandro,
Assistant Manager, Engine & Propeller Directorate,
Aircraft Certification Service.

[FR Doc. 2013-06114 Filed 03/19/2013 at 8:45 am; Publication Date: 03/20/2013]